

7-1: Basic Principles of Probability

- What do probabilities measure?
- What is probability theory?
- What is an experiment?
- What are outcomes?
- What is the sample space of an experiment?
- What is an event?
- How do you determine the probability that an event occurs?
- What is a fair experiment?
- What is a biased experiment?
- What are the basic properties of probability (3 parts)?

7-2: Addition Counting Principles

- What is a union?
- What does it mean to have sets that are disjoint or mutually exclusive?
- What is an intersection?
- What is the addition counting principle (mutually exclusive)?
- What is the probability of the union of mutually exclusive events?
- What is the addition counting principle (general form)?
- What is the probability of a union of events (general form)?
- What are complementary events?
- How do you find the probability of complements?

7-3: Multiplication Counting Principles

- What is the multiplication counting principle?
- How do you determine the possible arrangements of selections with replacement?
- What is a factorial?
- How do you determine the possible arrangements of selections without replacement?

7-4: Permutations

- What is a permutation?
- How do you determine the number of permutations of n elements?
- What is the formula for finding the permutations of n objects taken r at a time?
- Why does $0! = 1$?

7-5: Independent Events

- What are independent events?
- What are dependent events?

7-6: Probability Distributions

- What is a random variable?
- What is a probability distribution?
- How do you calculate the mean or expected value μ ?

7-7: Designing Simulations and 7-8: Simulations with Technology

- What is a simulation?
- What is the Monte Carlo method?
- What are some ways to generate random numbers?
- Where do you find the probability simulations in your graphing calculator?

Chapter 7 Projects (Due the day after the Chapter 7 Test)

You will have the entire chapter to work on your project. You may work with one partner, or you may work by yourself. You are to choose one of the Chapter Seven Projects on pages 478-479 and work on it *as we progress through the chapter*. You will use the same rubric as we have been using on projects throughout the entire year.

Chapter 7 Wiki Summaries:

- 7-1: Allison R. and Bonus*
- 7-2: Bonus and Bonus
- 7-3: Bonus and Bonus
- 7-4: Bonus and Bonus
- 7-5: Bonus and Bonus
- 7-6: Bonus and Bonus
- 7-7 and 7-8: Dalton F. and Robert W.

*Bonus wiki summaries will be posted on the back board. Sections 7-7 and 7-8 will be on the fourth marking period and are normally assigned wiki summaries.

Chapter 7 Homework Assignments

- 7-1: p. 431 #1-23
- 7-2: p. 437 #1-24
- 7-3: p. 443 #1-21
- Study for Quiz 7-1 to 7-3
- 7-4: p. 447 #1-25
- 7-5: p. 454 #1-21
- 7-6: p. 461 #1-18
- Study for Quiz 7-4 to 7-6
- 7-7/7-8: p. 469 #8-15, p. 476 #10 - 22